APPENDIX G

COMMENT LETTERS AND DOE RESPONSES

Four letters were received commenting on the draft version of this EIS. The letter and responses are contained in this appendix.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 29 1980

OFFICE OF THE
ADMINISTRATOR

Dr. Goetz K. Oertel, Director
Division of Waste Products
Office of Nuclear Waste Management
Mail Stop B-107
Washington, D. C. 20545

Dear Dr. Oertel:

In accordance with Section 309 of the Clean Air Act, as amended, the U.S. Environmental Protection Agency (EPA) has reviewed the draft supplemental Environmental Impact Statement (EIS) "Double-Shell Tanks for Defense High-Level Radioactive Waste Storage, Aiken, South Carolina (DOE/EIS-0062-D).

We find that the EIS adequately addresses the environmental issues and we agree that the use of double-shell tanks for storage on an interim basis is a beneficial action.

On the basis of our review, we have rated the action and the document as LO-1 (Lack of objections and an adequate analysis). The classification and date of EPA's comments will be published in the Federal Register.

Please contact Ms. Betty Jankus of my staff at 202/755-0770 should you have any questions about this matter.

Sincerely yours,

William N. Hedeman, Jr.
Director
Office of Environmental Review

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333

March 8, 1980

Dr. G. K. Oertel
U.S. Department of Energy
M.S. B-107
Washington, D.C. 20545

Dear Dr. Oertel:

The Draft Environmental Impact Statement (Supplement to ERDA-1537, September 1977), Waste Management Operations, Savannah River Plant, Aiken, South Carolina, has been reviewed by the Bureau of Radiological Health, Food and Drug Administration. We are submitting their comments on behalf of the Public Health Service.

1. Our assessment of the design and alternative support the conclusion that the design alternatives would not provide sufficient improvements to outweigh the disadvantages and warrant their incorporation into the presently designed tanks. From the data presented in the statement, it is our judgment that the design of the tanks under construction provides features that assure that the normal release rates of radioactive material will maintain potential exposure well within present radiation protection standards.

2. The statement does not contain specific information on emergency planning and coordination with the South Carolina State radiation emergency plan. Because of the potential public health impact from abnormal operations or accidents, Section 5.1.3 should be expanded to include a discussion of the facility's emergency plan as it relates to the high-level radioactive waste storage tanks. Such a discussion is important at this time in view of the public's concern regarding potential exposure to low levels of radiation.

Thank you for the opportunity of reviewing this draft document. We would appreciate receiving two copies of the final statement when it is issued.

Sincerely yours,

Frank S. Lisella

Frank S. Lisella, Ph.D.
Chief, Environmental Affairs Group
Environmental Health Services Division
Bureau of State Services

NATIONAL SCIENCE FOUNDATION
WASHINGTON, D.C. 20550

March 5, 1980

Mr. Sheldon Meyers
Acting Deputy Assistant Secretary
for Nuclear Waste Management
Department of Energy
Washington, DC 20585

Dear Mr. Meyers:

Several individuals at the National Science Foundation have reviewed the DEIS's on Double-Shell Tanks for Defense High-Level Radioactive Waste Storage at both the Hanford Site (DOE/EIS-0063-D) and the Savannah River Plant (DOE/EIS-0062-D). The reviewers felt the DEIS's were quite similar, so the following comments refer specifically to the Savannah River Plant site:

1. The present volume does not describe safeguard measures and procedures. (Perhaps the original document covers this point.) Physical protection of radioactive materials is necessary to minimize the possibility of saboteurs . The present double-shell tanks may have some advantages on this score, too. More information on this issue may be necessary.

2. A more comprehensive failure analysis could be helpful. The present description of potential failures (leaking is only one mode) and procedures to be taken during the failures is not comprehensive enough to assure confidence.

3. How do they assure the quality assurance of these tanks? Presumably, these tanks are field-erected. Are there any accepted initial and periodic inspection procedures during and after the construction?

4. It could be helpful if the role of the proposed tanks in the overall nuclear waste management were described. This technology may be transferable to the management of civilian cases, if the future development allows some sort of chemical separation. Does the Savannah River Plant program incorporate some experimental or demonstrative tests?

5. The old tanks do need to be replaced.

6. The new design is a significant improvement.

7. Operation of the old tank farm has been exemplary in terms of safety (if all the facts are known).

8. Backup volume ("spare volume," p. 21, 3.2, 2.2) seems to be skimpy. It should probably be increased to twice the maximum single tank storage volume.

One reviewer expressed the sincere desire that such temporary (semi-permanent) means of storing radioactive waste would eventually be superseded by a more satisfactory long-term method.

Sincerely yours,

Adair F. Montgomery

Adair F. Montgomery
Chairman
Committee on Environmental Matters

# United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

ER-80/79

MAR 19 1980

Mr. Sheldon Meyers, Acting Deputy
Assistant Secretary for Nuclear
Waste Management
Department of Energy
Washington, D.C. 20585

Dear Mr. Meyers:

The Department of the Interior has reviewed the draft environmental statement for Waste Management Operations, Savannah River Plant, Barnwell and Aiken Counties, South Carolina. We have the following comments.

Because of the importance of potential groundwater impacts, the environmental statement should include typical values for the coefficients of transmissivity and storage for aquifers and formational units that might be affected or any other data that would permit assessment of groundwater velocities. A water-table map of the vicinity of the tanks is needed; the map should show the locations of the tanks and of streams that would intercept any groundwater that might become contaminated.

We suggest also that the potential for overfilling the tanks, which would result in release of radionuclides to the environment, should be assessed, inasmuch as this has occurred at least once in the past from an earlier style of tank.

We hope these comments will be of assistance.

Sincerely,

James H. Rathlesberger
Special Assistant to
Assistant SECRETARY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

FEB 29 1980

Office of the
Administrator

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Office of Nuclear Waste Management
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Please contact Ms. Betty Jankus of my staff at 202/755-0770 should you have any questions about this matter.

Sincerely yours,

/s/ William N. Hedeman, Jr.

William N. Hedeman, Jr.
Director
Office of Environmental Review

RESPONSE

No response required.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
CENTER OF DISEASE CONTROL
ATLANTA, GEORGIA 30333

March 8, 1980

Dr. G. K. Oertel
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Sincerely yours,

/s/ Frank S. Lisella

Frank S. Lisella, Ph.D.
Chief, Environmental Affairs Group
Environmental Health Services Division
Bureau of State Services

RESPONSE

No response required.

Section 5.1.3 was expanded to include Section 5.1.3.2, Emergency Planning. SRP is actively working with the states of South Carolina and Georgia in planning and coordinating the necessary emergency response.

NATIONAL SCIENCE FOUNDATION

WASHINGTON, D.C. 20550

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Acting Deputy Assistant Secretary
for Nuclear Waste Management
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1. The present volume does not describe safeguard measures and procedures. (Perhaps the original document covers this point.) Physical protection of radioactive materials is necessary to minimize the possibility of saboteurs. The present double-shell tanks may have some advantages on this score, too. More information on this issue may be necessary.

2. A more comprehensive failure analysis could be helpful. The present description of potential failures (leaking is only one mode) and procedures to be taken during the failures is not comprehensive enough to assure confidence.

3. How do they assure the quality assurance of these tanks? Presumably, these tanks are field-erected. Are there any accepted initial and periodic inspection procedures during and after the construction?

RESPONSES

1. The safeguard measures for the waste tank farms are described on pages III-101 and 102, "Sabotage, Diversion of Fissionable Materials, and Acts of War" in ERDA-1537, Final Environmental Impact Statement, Waste Management Operations, Savannah River Plant, Aiken, S. C., September 1977.

   Revision of the document was not required.

2. A comprehensive analysis of all failure modes was performed for the waste storage system and is only summarized in Section 5.1.3, "Releases from Abnormal Operations or Accidents" (Tables 5.2, 5.3, and 5.4). Greater detail is presented in ERDA-1537, "Potential Effects of Abnormal Operation of Waste Storage and Handling Facilities" beginning on page III-82.

   Revision of the document was not required.

3. These waste tanks were designed and constructed under increasingly rigorous Quality Assurance plans. The SRP Quality Assurance Policy was developed and accepted by DOE based on the intent of 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants. Refer to page A-6 of this EIS for a summary of the inspection and testing during construction.

   Upon completion of construction, formal procedures are followed by the operating organization to inspect, check-out and run-in the equipment under expected operating loads, etc. before the equipment is accepted and placed in service. The post-operation inspection program is described in ERDA-1537 beginning on page II-102.

   Revision of the document was not required.

4. It could be helpful if the role of the proposed tanks in the overall nuclear waste management were described. This technology may be transferable to the management of civilian cases, if the future development allows some sort of chemical separation. Does the Savannah River Plant program incorporate some experimental or demonstrative tests?

4. The SRP waste management plan for high-level liquid waste is fully described in ERDA-1537 beginning on page II-64. As part of this plan, these new waste tanks will provide reliable, interim storage of the waste until a final decision is made for the permanent disposal of the waste. Appendix F in this document gives the specific schedule for use of the SRP waste tanks.

   The new waste tanks were designed and are being built specifically for the SRP waste and waste management program and therefore have limited commercial applicability.

   Appendix C of this document discusses the SRP demonstrations and tests currently underway or planned for waste removal and tank decommissioning which ultimately may be of value for civilian waste management programs.

   Revision of the document was not required.

5. The old tanks do need to be replaced.

5. No response needed.

6. The new design is a significant improvement.

6. No response needed.

7. Operation of the old tank farm has been exemplary in terms of safety (if all the facts are known).

7. No response needed.

8. Backup volume ("spare volume," p. 21, 3.2, 2.2) seems to be skimpy. It should probably be increased to twice the maximum single tank storage volume.

8. The backup volume (minimum of one tank per area) is considered sufficient because of the flexibility of the operation. Spare volume in each area is equivalent to the largest volume of waste stored in any one tank. The inter-area waste transfer lines are available for transfer of waste between the tank farm areas so that all available spare tanks are available to either area as necessary. This spare volume requirement is covered in ERDA-1537 on page II-71.

   Refer to the answer for comment 4 for the role of the new tanks in the SRP waste management program.

   Revision of the document was not required.

One reviewer expressed the sincere desire that such temporary (semi-permanent) means of storing radioactive waste would eventually be superseded by a more satisfactory long-term method.

The program for the long-term management of waste is under active study and development. Refer to DOE/EIS-0023, Final Environmental Impact Statement, Long-Term Management of Defense High-Level Radioactive Wastes (Research and Development Program for Immobilization), Savannah River Plant, Aiken, S. C., November 1979. Also see Appendix 1, Long-Range Waste Management Program in ERDA-1537.

Revision of the document was not required.

Sincerely yours,

*Adair F. Montgomery*
Chairman
Committee on Environmental Matters

UNITED STATES DEPARTMENT OF THE INTERIOR

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

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We hope these comments will be of assistance.

Sincerely,

/s/ James H. Rathlesberger

James H. Rathlesberger
Special Assistant to
Assistant SECRETARY

RESPONSE

The hydrology, dose commitment, and methods for determining environmental radiation dose are all adequately covered in ERDA-1537, Final Environmental Impact Statement, Waste Management Operations, Savannah River Plant, September 1977. The disussion of the design alternatives in this supplemental EIS did not require reviewing the hydrological data. Refer to the following sections and pages in ERDA-1537: Hydrology (II 138-152), Ground Water (II-146), Dose Commitment (III 28-35), Transportation of Liquid Radioactive Waste (III-136), and Appendix G, Releases to Liquid Effluents on page G-6. In addition, see the following figures for facility location and water table information (Figures II-13, 14, 15).

The subject of spills from waste tanks during waste transfers and leaks from tank failures or overfilling is covered in ERDA-1537 in Abnormal Operations on pages III 82-95. Improved instrumentation (reel tapes) and administrative controls of transfers should prevent overfilling the tanks.

Revision of the document was not required.